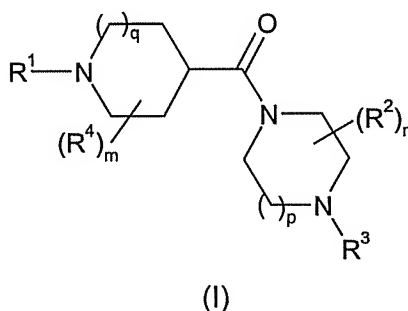


**Amendments To The Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

1. (Previously Amended) A compound of formula (I) or a pharmaceutically acceptable salt thereof:



wherein:

$R^1$  represents aryl, heteroaryl, -aryl-X- $C_{3-7}$  cycloalkyl, -heteroaryl-X- $C_{3-7}$  cycloalkyl, -aryl-X-aryl, -aryl-X-heteroaryl, -aryl-X-heterocyclyl, -heteroaryl-X-heteroaryl, -heteroaryl-X-aryl or -heteroaryl-X-heterocyclyl;

wherein said aryl, heteroaryl and heterocyclyl groups of  $R^1$  may be optionally substituted by one or more substituents which may be the same or different, and which are selected from the group consisting of halogen, hydroxy, cyano, nitro, oxo, halo $C_{1-6}$  alkyl, polyhalo $C_{1-6}$  alkyl, halo $C_{1-6}$  alkoxy, polyhalo $C_{1-6}$  alkoxy,  $C_{1-6}$  alkyl,  $C_{1-6}$  alkoxy,  $C_{1-6}$  alkylthio,  $C_{1-6}$  alkoxy $C_{1-6}$  alkyl,  $C_{3-7}$  cycloalkyl $C_{1-6}$  alkoxy, -COC $C_{1-6}$  alkyl, -COC $C_{1-6}$  alkyl-halogen, -COC $C_{1-6}$  alkyl-cyano,  $C_{1-6}$  alkoxy carbonyl,  $C_{1-6}$  alkylsulfonyl,  $C_{1-6}$  alkylsulfinyl,  $C_{1-6}$  alkylsulfonyloxy,  $C_{1-6}$  alkylsulfonyl $C_{1-6}$  alkyl,  $C_{1-6}$  alkylsulfonamido $C_{1-6}$  alkyl,  $C_{1-6}$  alkylamido $C_{1-6}$  alkyl, aryl, arylsulfonyl, arylsulfonyloxy, aryloxy, arylsulfonamido, arylcarboxamido, aroyl,  $NR^{15}R^{16}$ , -CONR $^{15}R^{16}$ , -NR $^{15}$ COR $^{16}$ , -C(R $^{15}$ )=NOR $^{16}$ , -NR $^{15}$ SO $_2$ R $^{16}$  and -SO $_2$ NR $^{15}R^{16}$ , wherein  $R^{15}$  and  $R^{16}$  independently represent hydrogen or  $C_{1-6}$  alkyl or together form a heterocyclic ring;

X represents a bond, O, CO, SO $_2$ , OCH $_2$  or CH $_2$ O;

each  $R^2$  and  $R^4$  independently represents  $C_{1-4}$  alkyl;

$R^3$  represents  $C_{3-8}$  alkyl,  $C_{3-6}$  alkenyl,  $C_{3-6}$  alkynyl,  $C_{3-6}$  cycloalkyl,  $C_{5-6}$  cycloalkenyl or - $C_{1-4}$ alkyl- $C_{3-6}$  cycloalkyl;

wherein said  $C_{3-6}$  cycloalkyl groups of  $R^3$  may be optionally substituted by one or more substituents which may be the same or different, and which are selected from the group consisting of halogen,  $C_{1-4}$  alkyl and trifluoromethyl;

m and n independently represent 0, 1 or 2;

p and q independently represent 1.

2. (Previously Amended ) A compound of formula (I) as defined in claim 1 wherein R<sup>1</sup> represents

- aryl optionally substituted by 1, 2 or 3 halogen, C<sub>1-6</sub> alkyl, polyhaloC<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, polyhaloC<sub>1-6</sub> alkoxy, -COC<sub>1-6</sub> alkyl, -C(R<sup>15</sup>)=NOR<sup>16</sup>, -NR<sup>15</sup>COR<sup>16</sup>, -COC<sub>1-6</sub> alkyl-halogen, -COC<sub>1-6</sub> alkyl-cyano, cyano or C<sub>1-6</sub> alkoxycarbonyl groups;
- aryl-X-C<sub>3-7</sub> cycloalkyl;
- aryl-X-aryl;
- aryl-X-heterocyclyl optionally substituted by 1, 2 or 3 halogen or oxo groups;
- aryl-X-heteroaryl optionally substituted by a C<sub>1-6</sub> alkyl or aryl group;
- heteroaryl optionally substituted by 1, 2 or 3 cyano, halogen, polyhaloC<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkoxycarbonyl or -CONR<sup>15</sup>R<sup>16</sup> groups;
- heteroaryl-X-aryl optionally substituted by 1, 2 or 3 cyano or C<sub>1-6</sub> alkylsulfonyl groups;
- heteroaryl-X-heterocyclyl; or
- heteroaryl-X-heteroaryl.

3. (Original) A compound of formula (I) as defined in claim 2 wherein R<sup>1</sup> represents

- phenyl, naphthyl or indanone optionally substituted by 1, 2 or 3 halogen, C<sub>1-6</sub> alkyl, polyhaloC<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, polyhaloC<sub>1-6</sub> alkoxy, -COC<sub>1-6</sub> alkyl, -C(R<sup>15</sup>)=NOR<sup>16</sup>, -NR<sup>15</sup>COR<sup>16</sup>, -COC<sub>1-6</sub> alkyl-halogen, -COC<sub>1-6</sub> alkyl-cyano, cyano or C<sub>1-6</sub> alkoxycarbonyl groups;
- phenyl-CO-cyclopropyl or -phenyl-CO-cyclobutyl;
- phenyl-thiazolyl, -phenyl-oxadiazolyl, -phenyl-pyrrolyl, -phenyl-oxazolyl or -phenyl-isoxazolyl optionally substituted by a C<sub>1-6</sub> alkyl or aryl group; or
- pyridyl, pyrimidyl, pyrazinyl, pyridazinyl, quinolinyl, isoquinolinyl or benzothiazolyl optionally substituted by 1, 2 or 3 cyano, halogen, polyhaloC<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkoxycarbonyl or -CONR<sup>15</sup>R<sup>16</sup> groups.

4. (Original) A compound of formula (I) as defined in claim 3 wherein R<sup>1</sup> represents

- phenyl optionally substituted by 1, 2 or 3 halogen, polyhaloC<sub>1-6</sub> alkyl, -NR<sup>15</sup>COR<sup>16</sup>, -COC<sub>1-6</sub> alkyl or cyano groups;
- phenyl-CO-cyclopropyl;
- phenyl-oxadiazolyl or -phenyl-oxazolyl optionally substituted by a C<sub>1-6</sub> alkyl or aryl group; or
- pyridyl, pyrimidyl, pyrazinyl, pyridazinyl or quinolinyl optionally substituted by 1, 2 or 3 halogen, polyhaloC<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkyl or cyano groups.

5. (Original) A compound of formula (I) as defined in claim 4 wherein R<sup>1</sup> represents  
phenyl optionally substituted at the 4-position by a -COMe, -COEt or cyano group; or  
pyridyl or quinoliny optionally substituted by a methyl or CF<sub>3</sub> group.
6. (Original) A compound of formula (I) as defined in claim 5 wherein R<sup>1</sup> represents  
- 6-CF<sub>3</sub>-pyridin-3-yl.
7. (Previously Amended) A compound of formula (I) as defined in claim 1 wherein X represents a bond, O or CO.
8. (Original) A compound of formula (I) as defined in claim 7, wherein X represents a bond or CO.
9. (Previously Amended) A compound of formula (I) as defined in claim 1 wherein m represents 0.
10. (Cancelled)
11. (Currently Amended) A compound of formula (I) as defined in claim-~~10~~1 wherein n represents 0 or 1.
12. (Currently Amended) A compound of formula (I) as defined in claim-~~10~~1 wherein R<sup>2</sup> represents methyl.
13. (Original) A compound of formula (I) as defined in claim 11 wherein n represents 0.
14. (Cancelled).
15. (Previously Amended) A compound of formula (I) as defined claim 1 wherein R<sup>3</sup> represents C<sub>3-8</sub> alkyl or C<sub>3-6</sub> cycloalkyl.
16. (Original) A compound of formula (I) as defined in claim 15 wherein R<sup>3</sup> represents isopropyl, isobutyl or cyclobutyl.

17. (Original) A compound of formula (I) as defined in claim 16 wherein R<sup>3</sup> represents isopropyl or cyclobutyl.

18. (Original) A compound of formula (I) as defined in claim 17 wherein R<sup>3</sup> represents isopropyl.

19. (Cancelled)

20. (Previously Amended) A compound of formula (I) as defined in claim 1 which is 1-Isopropyl-4-[1-(5-cyano-pyridin-2-yl)-piperidine-4-carbonyl]-piperazine;  
1-Isopropyl-4-[1-(5-methoxycarbonyl-4-trifluoromethylpyridin-2-yl)-piperidine-4-carbonyl]-piperazine;  
1-Isopropyl-4-[1-(4-ethoxycarbonylphenyl)-piperidine-4-carbonyl]-piperazine;  
1-Cyclobutyl-4-[1-(4-cyanophenyl)-piperidine-4-carbonyl]-piperazine;  
1-Cyclobutyl-4-[1-(4-cyano-3-fluorophenyl)-piperidine-4-carbonyl]-piperazine;  
1-Cyclobutyl-4-[1-(4-cyano-2,6-difluorophenyl)-piperidine-4-carbonyl]-piperazine;  
1-Cyclobutyl-4-[1-(4-cyano-3-trifluoromethylphenyl)-piperidine-4-carbonyl]-piperazine;  
1-Cyclobutyl-4-[1-(4-cyano-naphthalen-1-yl)-piperidine-4-carbonyl]-piperazine;  
1-Cyclobutyl-4-[1-(5-cyanopyridin-2-yl)-piperidine-4-carbonyl]-piperazine;  
1-Cyclobutyl-4-[1-(6-trifluoromethylpyridin-2-yl)-piperidine-4-carbonyl]-piperazine;  
1-Cyclobutyl-4-[1-(5-trifluoromethylpyridin-2-yl)-piperidine-4-carbonyl]-piperazine;  
1-Cyclobutyl-4-[1-(3-chloro-5-trifluoromethylpyridin-2-yl)-piperidine-4-carbonyl]-piperazine;  
1-Isopropyl-4-{1-[5-(4-methylsulfonylphenyl)-pyrimidin-2-yl]-piperidine-4-carbonyl}-piperazine;  
1-Isopropyl-4-{1-[4-(morpholino-carbonyl)-phenyl]-piperidine-4-carbonyl}-piperazine;  
1-Cyclopentyl-4-[1-(4-cyano-phenyl)-piperidine-4-carbonyl]-piperazine;  
(2R,6S)-1-Cyclobutyl-4-[1-(4-cyanophenyl)-piperidine-4-carbonyl]-2,6-dimethylpiperazine;  
1-Isopentyl-4-[1-(5-cyano-pyridin-2-yl)-piperidine-4-carbonyl]-piperazine;  
(S)-1-Isopropyl-4-[1-(4-cyanophenyl)-piperidine-4-carbonyl]-2-methylpiperazine;  
(S)-1-Isopropyl-4-[1-(6-cyanopyridin-3-yl)-piperidine-4-carbonyl]-2-methylpiperazine;  
(S)-1-Isopropyl-4-[1-(5-cyanopyridin-2-yl)-piperidine-4-carbonyl]-2-methylpiperazine;  
(S)-1-Isopropyl-4-[1-(5-trifluoromethyl-pyrazin-2-yl)-piperidine-4-carbonyl]-2-methyl piperazine;

(S)-1-Isopropyl-4-[1-(6-trifluoromethyl-pyridazin-3-yl)-piperidine-4-carbonyl]-2-methyl piperazine;

1-Isopropyl-4-{1-[4-(5-phenyl-1,3,4-oxadiazol-2-yl)phenyl]-piperidine-4-carbonyl} piperazine;

1-Isopropyl-4-[1-(quinolin-6-yl)-piperidine-4-carbonyl] piperazine;

1-Cyclobutyl-4-[1-(6-trifluoromethylpyridin-3-yl)-piperidine-4-carbonyl] piperazine;

1-Isopropyl-4-[1-(5-trifluoromethyl-pyrazin-2-yl)-piperidine-4-carbonyl]-piperazine;

(S)-1-Isobutyl-4-[1-(4-cyanophenyl)-piperidine-4-carbonyl]-piperazine;

1-Isopropyl-4-[1-(4-cyclopropylcarbonylphenyl)-piperidine-4-carbonyl]-piperazine;

1-Isopropyl-4-[1-(2-methyl-quinolin-6-yl)-piperidine-4-carbonyl]-piperazine;

1-Isopropyl-4-[1-(6-cyano-pyridin-3-yl)-piperidine-4-carbonyl]-piperazine;

1-Isopropyl-4-{1-[4-(3-methyl-1,2,4-oxadiazol-5-yl)phenyl]-piperidine-4-carbonyl}-piperazine;

or a pharmaceutically acceptable salt thereof.

21. (Previously Amended) A compound of formula (I) as defined in claim 1 which is

1-Isopropyl-4-[1-(4-cyanophenyl)-piperidine-4-carbonyl]-piperazine;

(S)-1-Isopropyl-4-[1-(6-trifluoromethylpyridin-3-yl)-piperidine-4-carbonyl]-2-methyl piperazine;

or a pharmaceutically acceptable salt thereof.

22. (Previously Amended) A compound of formula (I) as defined in claim 1 which is

1-Isopropyl-4-[1-(6-trifluoromethylpyridin-3-yl)-piperidine-4-carbonyl]-piperazine;

or a pharmaceutically acceptable salt thereof.

23. (Previously Amended) A pharmaceutical composition which comprises the compound of formula (I) as defined in claim 1 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier or excipient.

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

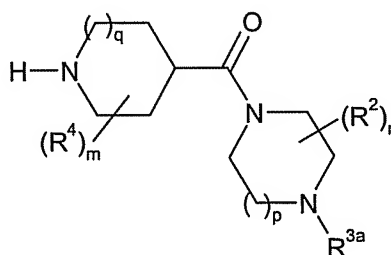
27. (Previously Amended) A method of treatment of a neurological disease which comprises administering to a host in need thereof an effective amount of a

compound of formula (I) as defined in claim 1 or a pharmaceutically acceptable salt thereof, wherein said neurological disease is selected from the group consisting of Alzheimer's disease, mild cognitive impairment, and age-related memory dysfunction.

28. (Cancelled)

29. (Previously Amended) A process for the preparation of a compound of formula (I) or a pharmaceutically acceptable salt thereof, which process comprises:

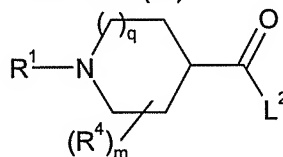
(a) reacting a compound of formula (II)



(II)

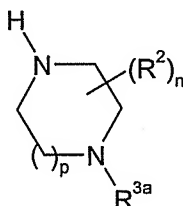
or an optionally activated or protected derivative thereof, wherein  $R^2$ ,  $R^4$ ,  $m$ ,  $n$ ,  $p$  and  $q$  are as defined in claim 1 and  $R^{3a}$  is as defined for  $R^3$  in claim 1 or a group convertible to  $R^3$ , with a compound of formula  $R^1-L^1$ , wherein  $R^1$  is as defined in claim 1 and  $L^1$  represents a suitable leaving group, followed by a deprotection reaction as necessary; or

(b) reacting a compound of formula (III)



(III)

wherein  $R^1$ ,  $R^4$ ,  $m$  and  $q$  are as defined in claim 1 and  $L^2$  represents OH or a suitable leaving group, with a compound of formula (IV)



(IV)

wherein  $R^2$ ,  $n$  and  $p$  are as defined in claim 1  $R^{3a}$  is as defined for  $R^3$  in claim 1 or a group convertible to  $R^3$ ; or

(c) deprotecting a compound of formula (I) or converting groups which are protected; and optionally thereafter

(d) interconversion to other compounds of formula (I).